EagleRockCEm Resource

From: Sara Cohn [scohn@idahoconservation.org]
Sent: Monday, September 27, 2010 10:57 AM
To: Lemont, Stephen
Subject: Re: Questions on Comment from Idaho Conservation League on AREVA Eagle Rock Draft EIS
Attachments: NRC Depleted Uranium 10-28-09.pdf; AREVA Enrichment Scoping.pdf

Stephen,
Thank you for pointing out my mistake. Here are the two attachments (Attachment A – Scoping Comments, Attachment B- NRC Rulemaking comments) I meant to send along with our comments. Let me know if you have any further questions.

Sara Cohn
Community Conservation Associate
Idaho Conservation League
PO Box 844, Boise, ID 83701
208.345.6942 x 23 • fax 208.344.0344
http://www.idahoconservation.org • http://www.idahoconservation.org/blog

Idaho's leading voice for conservation

From: "Lemont, Stephen" <Stephen.Lemont@nrc.gov>
Date: Fri, 24 Sep 2010 12:42:35 -0400
To: Sara Cohn <scohn@idahoconservation.org>
Subject: Questions on Comment from Idaho Conservation League on AREVA Eagle Rock Draft EIS

Dear Ms. Cohn:

The U.S. Nuclear Regulatory Commission (NRC) staff is in the process of reviewing the comments we received on the Draft Environmental Impact Statement (EIS) for the AREVA Eagle Rock Enrichment Facility. In so doing, we found that we need clarification or additional information from you regarding your attached comment, designated "Comment (37)" in the NRC's system.

In the waste storage section of your comment, there is a reference to an Attachment A and an Attachment B. My questions for you are as follows:

1. We believe that Attachment A refers to the attached PDF file named, ML093090480. Is that your Attachment A? If not, then please send me a copy of the correct Attachment A.

2. We do not seem to have Attachment B and do not know which document Attachment B refers to (or if it exists). Is there in fact an Attachment B? If yes, then please send a copy of that to me.

If you will be sending me Attachment A and/or Attachment B, please send them to me electronically by email if possible.

Please contact me if you have any questions or need additional information. The NRC appreciates your assistance in this matter.

Thanks,
Steve Lemont

Stephen Lemont, Ph.D.
Senior Environmental Project Manager
U. S. Nuclear Regulatory Commission
Office of Federal and State Materials and
Environmental Management Programs
Mail Stop: T-8F5
Washington, DC 20555-0001
Telephone: 301-415-5163
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Email: Stephen.Lemont@nrc.gov

Federal Register Notice: 74FR42466
Comment Number: 84

Mail Envelope Properties (C8C60CD3.987D%scohn)

Subject: Re: Questions on Comment from Idaho Conservation League on AREVA Eagle Rock Draft EIS
Sent Date: 9/27/2010 10:56:48 AM
Received Date: 9/27/2010 10:57:22 AM
From: Sara Cohn

Created By: scohn@idahoconservation.org

Recipients:
"Lemont, Stephen" <Stephen.Lemont@nrc.gov>
Tracking Status: None

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Files	**Size**	**Date & Time**
MESSAGE	2282	9/27/2010 10:57:22 AM
NRC Depleted Uranium 10-28-09.pdf	333966	
AREVA Enrichment Scoping.pdf	297966	

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www.wildidaho.org

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Chief, Rulemaking and Directives Branch
Division of Administrative Services
Office of Administration
U.S. Nuclear Regulatory Commission
Mail Stop TWB-05-B01M
Washington, DC 20555-0001

October 28, 2009

RE: Federal Register June 24, 2009, pgs 30175-30179 - Notice of Public Workshop on a Potential Rulemaking for Safe Disposal of Unique Waste Streams Including Significant Quantities of Depleted Uranium

To Whom it May Concern;

Thank you for the opportunity to provide comments on the notice of public workshops and potential rulemaking activities for the safe disposal of unique waste steams including significant quantities of depleted uranium. Since 1973, the Idaho Conservation League (ICL) has been Idaho's voice for clean water, clean air, and wilderness—values that are the foundation to Idaho's extraordinary quality of life. As Idaho's largest state-based conservation organization we represent over 9,800 members, many of whom have a deep personal interest in protecting Idaho's natural resources and public health.

The ICL is aware the public workshops and proposed rulemaking will likely influence the storage of significant amounts of depleted uranium produced by the proposed AREVA Enrichment facility in Idaho Falls, Idaho (see Attachment A, *Scoping Comments for Proposed AREVA Enrichment Services, LLC Eagle Rock Enrichment, Idaho Falls, ID - Docket No. 70-7015, June 18, 2009*). Temporary or long-term storage of significant amounts of depleted uranium may result in the release of pollutants to Idaho's natural resources or may compromise public health. As the Nuclear Regulatory Commission (NRC) proceeds with the public workshops and the proposed rulemaking, further analysis and guidance must be provided to ensure that no adverse impacts occur to pollute Idaho's clean water and clean air, or endanger public health.

Specifically, we suggest the following:

- More clarity is needed with regard to the scope of the potential rulemaking.
- Until regulations are in place governing disposal of depleted uranium and disposal facilities have implemented those regulations, it is inappropriate to license any new uranium enrichment facility.
- The NRC should coordinate with appropriate federal agencies, such as the U.S. Environmental Protection Agency (EPA) and others, to ensure comprehensive analysis of potential disposal sites and to protect natural resource, human health,

and national security.

We look forward to working with the NRC, additional federal agencies and interested parties to design rules that guide the storage of depleted uranium waste, preserve Idaho's natural resources, and provide adequate assurances that storage will not adversely impact public health. Please find my contact information below and keep us on the list to receive additional public notices with regard to the workshops and proposed rulemaking.

Sincerely,

Sara Cohn
Community Conservation Associate
Idaho Conservation League
P.O. Box 844
Boise, Idaho 83701
(208) 345-6942 ex 23

ICL Comment Regarding Public Workshops and Potential Rulemaking for Safe Disposal of Unique Waste Streams Including Significant Quantities of Depleted Uranium

Scope of Workshops and Potential Rulemaking

The Federal Register Notice provided limited guidance with regard to the scope of the proposed rulemaking. It is unclear what types of waste will be included in workshop discussions or the potential rule. Based on the information provided, it is not possible to conclude that is appropriate to combine the guidance for safe disposal of undefined "unique waste streams" and significant quantities of depleted uranium. NRC should provide a definition for "other unique waste streams" to further inform workshop discussions and ensure that any potential rule developed is appropriate for type of waste slated for disposal. It is also unclear what type of facility would be considered a disposal site. NRC should clarify whether workshops or potential rulemaking will address both the temporary and long term storage/disposal of depleted uranium and other waste streams. NRC should provide clarity regarding the definition of "disposal" in this context.

Permitting Enrichment Facilities

ICL has provided public comments on NEPA scoping analysis for the proposed AREVA Enrichment facility in Idaho Falls, Idaho (see Attachment A). As the current Federal Register announcement suggests, NRC does not currently provide adequate guidance for the type of waste streams that will be created by the proposed AREVA enrichment facility. Until regulations are in place governing disposal of depleted uranium and disposal facilities have implemented those regulations, ICL believes it is inappropriate to license any new uranium enrichment facility. NRC should consider the creation of adequate rules to guide the safe disposal of depleted uranium as paramount to permitting individual facilities.

Coordination with Associated Federal Agencies

Depleted uranium and other unique waste streams pose as a threat to natural resources, public health, and national security. As such, the NRC should coordinate with relevant federal agencies during the workshop and potential rulemaking. Such agencies would include the EPA, the National Security Agency (NSA), the Department of Energy, the Department Homeland Security, the U.S. Department of Health and Human Services, among others. NRC should consult and coordinate with these agencies to ensure that the guidance for disposal of unique waste streams and depleted uranium is consistent with existing regulations that protect natural resources, public health, and national security.

Attachment A

ICL Scoping Comments for Proposed AREVA Enrichment Services, LLC Eagle Rock Enrichment, Idaho Falls, ID - Docket No. 70-7015

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June 18, 2009

RE: Scoping Comments for Proposed AREVA Enrichment Services, LLC Eagle Rock Enrichment, Idaho Falls, ID - Docket No. 70-7015

To Whom it May Concern;

Thank you for the opportunity to comment on the Notice of Intent and Environmental Report for the proposed AREVA Enrichment facility in Idaho Falls, Idaho. Since 1973, the Idaho Conservation League (ICL) has been Idaho's voice for clean water, clean air, and wilderness—values that are the foundation to Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through citizen action, public education, and professional advocacy. As Idaho's largest state-based conservation organization we represent over 9,800 members, many of whom have a deep personal interest in protecting Idaho's natural resources and public health.

The ICL has reviewed the Environmental Report for the Eagle Rock Enrichment facility and is concerned that construction and operation of the facility will pollute Idaho's natural resources and compromise public health. The Environmental Report does not provide the level of detail that would ensure the reduction of impacts or appropriate mitigation plans. More detailed analysis must be given in subsequent documents to ensure that no adverse impacts occur that pollute Idaho's clean water and clean air, or endanger public health.

Specifically, we request that further analysis and mitigations plans will be prepared to:

- reduce the risks associated with transport and storage of toxic, hazardous, and/or radioactive materials;
- ensure no contamination of Idaho's waters;
- preserve Idaho's clean air;
- protect public health;
- analyze all potential risk associated with hazardous materials onsite, whether existing or proposed for storage;
- adequately document and mitigate for wildlife and habitat disturbances;
- and, reduce the risk of accident and fire.

We look forward to working with the project proponent, the U.S. Nuclear Regulatory Commission (NRC), additional federal agencies and interested parties to design a project that preserves Idaho's natural resources and provides adequate assurances that the project

will not adversely impact public health. Please keep us on the list to receive both a hard copy and an electronic copy of the Draft EIS.

Sincerely,

Sara Cohn
Community Conservation Associate
Idaho Conservation League

ICL Comments regarding AREVA Enrichment Services, Idaho Falls, Idaho

Transportation

The ICL is very concerned about the transportation of hazardous and toxic materials to and from the project site. Based on the size of the facility and the number of trips expected to transport hazardous and toxic materials, the possibility of accidental spills and subsequent contamination is high. Further analysis will be needed to ensure that the transport of hazardous materials to and from the site will not result in the pollution of Idaho's waters and air, or endanger public health. More information is needed to understand the size and scale of the enrichment facility, the amount of waste produced and transported from the site, and the amount of hazardous and toxic materials imported and exported from the site. We also request information regarding the methods of transport and the types of containment vessels that will be used to transport materials.

Detailed plans should be prepared to reduce contamination and public health risks in the event of a spill or accident during transport.

The Environmental Report does not provide cumulative risk analysis regarding the amount of hazardous or toxic materials to be imported and exported across state lines. The documents provided do not appropriately consider methods to minimize risks associated with transport routes options. Alternative transportation modes, such as rail, should be further analyzed. Transportation routes and modes that present significant risk to public health and natural resources should be avoided.

Permanent impacts associated with the project include the construction of two access roads from Highway 20 to the project site. Further analysis of this impact must include additional risk associated with fire and the spread of invasive weeds (for more detail on this topic see subsection Environmental Resources – *Invasive Weeds*).

Water Resources

The ICL is very concerned that spillage or leakage of hazardous materials and waste from the proposed facility will contaminate Idaho's surface or groundwater. We are concerned that there will be large quantities of hazardous, toxic, and radioactive materials produced and stored onsite and that these materials may contaminate Idaho's waters. The Snake River Plain Aquifer is southern Idaho's primary source of drinking and irrigation water. Should the facility operations result in the contamination of the aquifer, this pollution would have wide reaching affects on public health and Idaho's agricultural economy. Toxic and radioactive materials from enrichment facilities have been shown to leak through detention basins and contaminate groundwater. We are very concerned the proposed facility may contaminate Idaho's waters the way similar facilities have contaminated groundwater in Paducah, KY and Portsmouth, OH.

Due to the amount of pollutants expected to be stored onsite, the extremely hazardous nature of waste products like depleted uranium, the possibility of waste spills, the possibility of leakage from proposed retention basins, and the importance of the Snake River Plain Aquifer, much more information is needed to ensure no endangerment of public health or contamination of precious water resources. We request more information

with regard to the amount of waste and hazardous materials expected to be stored onsite, the types of preventative measures that will be in place to ensure no contamination of water, as well as plans outlining monitoring and reporting methods and responsible parties. The applicant should also prepare reports and plans that detail the roles and responsibilities of agencies and AREVA in the event of spillage or contamination from the site. These plans should outline remediation, public alerts, public safety measures, and clean up strategies, among all other necessary actions to protect environmental and public health.

Nitrate contamination of groundwater is also of concern. Recent findings indicate that long-term exposure to elevated concentrations of nitrate may contribute to the risk of developing bladder and ovarian cancers[1] and non-Hodgkin's lymphoma[2].

Air Quality

The ICL is very concerned about the potential release of radioactive, hazardous and toxic materials into the air. Potential air releases associated with operation of this facility should be further analyzed, reported, and permitted though Idaho's Department of Environmental Quality. The environmental documents mention the use of Gaseous Effluent Ventilation Systems. We are concerned about the waste associated with the ventilation system and would like more detail with regard to the use and disposal of any filter-like product that may contain pollutants. We also concerned that hazardous materials will be concentrated in retention basins prior to and after evaporation of any water. These materials have the potential to settle in sediments and be released into the air with other dust particles.

We request that the applicant include air monitoring and reporting plans that are specific to the operations of the proposed facility. These plans should include guidance for public alerts, immediate containment, responsible parties, etc., should air releases be detected.

Air pollution resulting from construction of the proposed facility should be avoided or reduced using the best available management practices and control technology. To preserve Idaho's clean air during construction operations, the NRC should include mitigation measures for these pollutants. For example, fugitive dust emissions can be controlled through the use of water trucks, provided the Storm Water Pollution Prevention Program (SWPPP) ensures no discharge of sediment from the site. Additionally, diesel emissions should be reduced using best management practices for construction including limited idling of diesel equipment and the use of low-emitting fuels and low-emitting technology for construction equipment.

Public Health

The ICL is concerned that operation of this facility may expose Idahoans to toxic, radioactive, and/or harmful pollutants. Further detail and analysis must investigate risks

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[1] Weyer, P.J., Cerhan, J.R., Kross, B.C., Hallberg, G.R., Kantamneni, J., Breuer, G., Jones, M.P., Zheng, W., and Lynch, C.F., 2001, Municipal drinking water nitrate level and cancer risk in older women: the Iowa women's health study: *Epidemiology*, v. 11, p. 327-338.

[2] Ward, M.H., Mark, S.D., Cantor, K.P., Weisenburger, D.D., Correa-Villasenor, A., and Zahm, S.H., 1996, Drinking water nitrate and the risk of non-Hodgkin's lymphoma: *Epidemiology*, v. 7, p. 465-471.

associated with water and air contamination from enrichment operations. We request detailed information regarding the amounts and types of materials used, produced, and stored onsite. We would like detailed information about how these materials may be released and how releases may endanger public health. Detailed plans to contain releases as well as alert and protect the public will be essential. Additionally, further analysis must ensure no air releases during transportation of both uranium product and waste to and from the site. The health of Idahoans is of primary import and should not be compromised by enrichment product, waste, or transport.

Hazardous Materials

The impact analysis did not contain any information regarding hazardous materials existing onsite, or proposed for storage. The EIS must provide information with regard to any hazardous materials existing or proposed for storage onsite and any cumulative risk associated with the storage, transport, and use of hazardous materials during project operations. Additionally, subsequent environmental documentation must include a Management Plan for Toxic and Hazardous Materials. This plan should address health and accident risks associated with toxic and hazardous materials onsite as well as accident prevention and management strategies. This information is incredibly important to protect the health and lives of emergency responders and communities such as Idaho Falls, Pocatello, and others that would potentially be harmed by facility operations. The ICL is concerned that a hazardous materials analysis was not included in the environmental analysis and we look forward to evaluating information on this subject.

Ecological Resources

The Environmental Report does not adequately address impacts to ecological resources on site. Due to pending sage-grouse and pygmy rabbit Endangered Species Act (ESA) listing, we suggest the applicant prepare environmental documentation and pursue the appropriate permits in anticipation of this ESA listing.

Avoid, Minimize, Mitigate
In terms of priorities, the NRC should first site facilities and infrastructure to avoid impacts to wildlife and cultural resources. If impacts cannot be entirely avoided, the NRC should incorporate design features to minimize impacts. Lastly, a plan should be prepared to mitigate for impacts that cannot be avoided or minimized.

Habitat, habitat fragmentation, and migration corridors
Portions of the project area contain habitat that is crucial to the sagebrush steppe obligate species such as sage-grouse, pygmy rabbits, sage thrasher, sage sparrow, and others. Such habitat has been severely fragmented and reduced through a variety of land management practices, including road construction and development of rights of way corridors. Although communities can't be listed under the endangered species act, sagebrush steppe habitat is considered by federal agencies as "imperiled" and an area of primary concern. The project should minimize negative impacts by avoiding areas of critical habitat for species of concern, establishing siting criteria to minimize soil disturbance and erosion on steep slopes, utilizing visual resource management guidelines, avoiding significant historic and cultural resource sites, and mitigating any potential disturbance of this habitat.

Sage-grouse
There is significant concern regarding the long-term viability of greater sage-grouse populations. The US Fish and Wildlife Service is currently conducting a finding of determination whether greater sage-grouse deserve protections under the Endangered Species Act. These protections could have far reaching effects on land management in Idaho and in the region.

Greater sage-grouse suffer from the loss, degradation, and fragmentation of habitat throughout the west. It's estimated that only 50-60% of the original sagebrush steppe habitat remains in the west (West 2000), and in 2007, the American Bird Conservancy listed sagebrush as the most threatened bird habitat in the continental United States.[3] As such, we cannot stress enough how important it is for agencies to consider impacts to sage-grouse, conserve existing habitat, and actively restore altered sagebrush steppe habitats due to project-related impacts.

Depending on location and design specifics, the construction of additional roads within sage-grouse habitat could constitute "nonlinear infrastructure" under the *Conservation Plan for the Greater Sage-grouse in Idaho (Idaho Sage-Grouse Advisory Committee 2006).* Nonlinear infrastructure is defined as "human-made features on the landscape that provide or facilitate transportation, energy, and communications activities." [4]The *Conservation Plan* lists infrastructure such as this as the second greatest threat for sage grouse, with wildfires as the greatest risk. Road construction and use associated with the facility represents high risk for loss of lek areas, nesting locations, and brood-rearing habitats (Braun 1986, Connelly et al. 2004). [5] [6]

Coordination with local stakeholder groups
We believe that an integral part of conserving and recovering sage-grouse will be relying on the guidance from local stakeholder groups. As such, we recommend that the applicant coordinate further efforts more closely with the US Fish and Wildlife Service, local Sage-grouse Working Groups, the Idaho State Sage Grouse Advisory Council, the Idaho Department of Fish and Game, and the Governor's Office of Species Conservation. Conservation groups to consult include the Audubon Society, the Idaho Chapter of the North American Grouse Partnership, the Idaho Falconer's Association, the Nature Conservancy, the Western Watersheds Project as well as the Idaho Conservation League.

Additional Wildlife
In addition to sage-grouse, other wildlife including pygmy rabbits, sage thrasher, sage sparrow, and birds of prey, are of concern. New construction and infrastructure will also change crucial habitat for these species and may inhibit the ability of these species to migrate. The project design should avoid construction in any designated areas or lands for

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[3] West, N.E. Synecology and disturbance regimes of sagebrush steppe ecosystems, p. 15-26. *In* P.G. Entwistle, A.M. DeBolt, J.H. Kaltenecker, and K. Steenhoff, Proceedings: sagebrush steppe ecosystems symposium. USDI Bureau of Land Management Publication BLM/ID/PT-001001+1150, Boise, ID.
[4] Idaho Sage-Grouse Advisory Committee. 2006. *Conservation Plan for the Greater Sage-grouse in Idaho*.
[5] Braun, C.E. 1986. Changes in sage-grouse lek counts with advent of surface coal mining. Proceedings, Issues and technology in the management of impacted western wildlife. *Thorne Ecological Institute* 2: 227-231.
[6] Connelly, J.W., Knick, S.T., Schroeder, M.A., and S.J. Stiver. 2004. Conservation assessment of greater sage-grouse and sagebrush habitats. Western Association of Fish and Wildlife Agencies. Unpublished Report. Cheyenne, Wyoming.

special management of these species. There are also elk, mule deer, and pronghorn antelope in the proposed project area.

The project should avoid and minimize all impact to big game winter habitat. The project site contains good to excellent antelope and sage-grouse habitat. We are concerned how the proposed project will impact this important habitat and the species that depend on it. We are also greatly concerned the project will impact nesting habitat for migratory birds.

Invasive Weeds
The most cost-effective way to deal with noxious weeds is to protect strongholds of native vegetation from activities that either spread noxious weeds directly or create suitable habitat by removing native vegetation and disturbing the soil. Project activities should limit road construction in areas that contain mineral soils where weeds may become established. Roads serve as a primary route for noxious weed species expansion. Special care should be taken to safeguard ecologically intact areas that are not currently infested. The EIS needs to analyze the effects of noxious weeds and describe management of weeds in the project area. For example, management strategies may include ensuring the tires and undercarriage of access vehicles are hosed down prior to site access to dislodge noxious weeds. Further documentation should analyze the effects of regular weed control activities in previously undisturbed areas. For example, weed treatments may affect non-target species and vehicle access may increase fire hazard and soil disturbance.

<u>Public Comment Opportunities</u>
Due to the nature and size of the proposed facility, we suggest the project proponent hold additional public hearings throughout the EIS process in Boise, Idaho.

www.wildidaho.org

Idaho Conservation League
PO Box 844, Boise, ID 83701
208.345.6933

Chief, Rules and Directives Branch
Mail Stop TWB-05-B01
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

June 18, 2009

RE: Scoping Comments for Proposed AREVA Enrichment Services, LLC Eagle Rock Enrichment, Idaho Falls, ID - Docket No. 70-7015

To Whom it May Concern;

Thank you for the opportunity to comment on the Notice of Intent and Environmental Report for the proposed AREVA Enrichment facility in Idaho Falls, Idaho. Since 1973, the Idaho Conservation League (ICL) has been Idaho's voice for clean water, clean air, and wilderness—values that are the foundation to Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through citizen action, public education, and professional advocacy. As Idaho's largest state-based conservation organization we represent over 9,800 members, many of whom have a deep personal interest in protecting Idaho's natural resources and public health.

The ICL has reviewed the Environmental Report for the Eagle Rock Enrichment facility and is concerned that construction and operation of the facility will pollute Idaho's natural resources and compromise public health. The Environmental Report does not provide the level of detail that would ensure the reduction of impacts or appropriate mitigation plans. More detailed analysis must be given in subsequent documents to ensure that no adverse impacts occur that pollute Idaho's clean water and clean air, or endanger public health.

Specifically, we request that further analysis and mitigations plans will be prepared to:

- reduce the risks associated with transport and storage of toxic, hazardous, and/or radioactive materials;
- ensure no contamination of Idaho's waters;
- preserve Idaho's clean air;
- protect public health;
- analyze all potential risk associated with hazardous materials onsite, whether existing or proposed for storage;
- adequately document and mitigate for wildlife and habitat disturbances;
- and, reduce the risk of accident and fire.

We look forward to working with the project proponent, the U.S. Nuclear Regulatory Commission (NRC), additional federal agencies and interested parties to design a project that preserves Idaho's natural resources and provides adequate assurances that the project

will not adversely impact public health. Please keep us on the list to receive both a hard copy and an electronic copy of the Draft EIS.

Sincerely,

Sara Cohn
Community Conservation Associate
Idaho Conservation League

ICL Comments regarding AREVA Enrichment Services, Idaho Falls, Idaho

Transportation

The ICL is very concerned about the transportation of hazardous and toxic materials to and from the project site. Based on the size of the facility and the number of trips expected to transport hazardous and toxic materials, the possibility of accidental spills and subsequent contamination is high. Further analysis will be needed to ensure that the transport of hazardous materials to and from the site will not result in the pollution of Idaho's waters and air, or endanger public health. More information is needed to understand the size and scale of the enrichment facility, the amount of waste produced and transported from the site, and the amount of hazardous and toxic materials imported and exported from the site. We also request information regarding the methods of transport and the types of containment vessels that will be used to transport materials.

Detailed plans should be prepared to reduce contamination and public health risks in the event of a spill or accident during transport.

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Permanent impacts associated with the project include the construction of two access roads from Highway 20 to the project site. Further analysis of this impact must include additional risk associated with fire and the spread of invasive weeds (for more detail on this topic see subsection Environmental Resources – *Invasive Weeds*).

Water Resources

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Due to the amount of pollutants expected to be stored onsite, the extremely hazardous nature of waste products like depleted uranium, the possibility of waste spills, the possibility of leakage from proposed retention basins, and the importance of the Snake River Plain Aquifer, much more information is needed to ensure no endangerment of public health or contamination of precious water resources. We request more information

with regard to the amount of waste and hazardous materials expected to be stored onsite, the types of preventative measures that will be in place to ensure no contamination of water, as well as plans outlining monitoring and reporting methods and responsible parties. The applicant should also prepare reports and plans that detail the roles and responsibilities of agencies and AREVA in the event of spillage or contamination from the site. These plans should outline remediation, public alerts, public safety measures, and clean up strategies, among all other necessary actions to protect environmental and public health.

Nitrate contamination of groundwater is also of concern. Recent findings indicate that long-term exposure to elevated concentrations of nitrate may contribute to the risk of developing bladder and ovarian cancers[1] and non-Hodgkin's lymphoma[2].

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[2] Ward, M.H., Mark, S.D., Cantor, K.P., Weisenburger, D.D., Correa-Villasenor, A., and Zahm, S.H., 1996, Drinking water nitrate and the risk of non-Hodgkin's lymphoma: *Epidemiology*, v. 7, p. 465-471.

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In terms of priorities, the NRC should first site facilities and infrastructure to avoid impacts to wildlife and cultural resources. If impacts cannot be entirely avoided, the NRC should incorporate design features to minimize impacts. Lastly, a plan should be prepared to mitigate for impacts that cannot be avoided or minimized.

Habitat, habitat fragmentation, and migration corridors
Portions of the project area contain habitat that is crucial to the sagebrush steppe obligate species such as sage-grouse, pygmy rabbits, sage thrasher, sage sparrow, and others. Such habitat has been severely fragmented and reduced through a variety of land management practices, including road construction and development of rights of way corridors. Although communities can't be listed under the endangered species act, sagebrush steppe habitat is considered by federal agencies as "imperiled" and an area of primary concern. The project should minimize negative impacts by avoiding areas of critical habitat for species of concern, establishing siting criteria to minimize soil disturbance and erosion on steep slopes, utilizing visual resource management guidelines, avoiding significant historic and cultural resource sites, and mitigating any potential disturbance of this habitat.

Sage-grouse
There is significant concern regarding the long-term viability of greater sage-grouse populations. The US Fish and Wildlife Service is currently conducting a finding of determination whether greater sage-grouse deserve protections under the Endangered Species Act. These protections could have far reaching effects on land management in Idaho and in the region.

Greater sage-grouse suffer from the loss, degradation, and fragmentation of habitat throughout the west. It's estimated that only 50-60% of the original sagebrush steppe habitat remains in the west (West 2000), and in 2007, the American Bird Conservancy listed sagebrush as the most threatened bird habitat in the continental United States.[3] As such, we cannot stress enough how important it is for agencies to consider impacts to sage-grouse, conserve existing habitat, and actively restore altered sagebrush steppe habitats due to project-related impacts.

Depending on location and design specifics, the construction of additional roads within sage-grouse habitat could constitute "nonlinear infrastructure" under the *Conservation Plan for the Greater Sage-grouse in Idaho (Idaho Sage-Grouse Advisory Committee 2006).* Nonlinear infrastructure is defined as "human-made features on the landscape that provide or facilitate transportation, energy, and communications activities." [4]The *Conservation Plan* lists infrastructure such as this as the second greatest threat for sage grouse, with wildfires as the greatest risk. Road construction and use associated with the facility represents high risk for loss of lek areas, nesting locations, and brood-rearing habitats (Braun 1986, Connelly et al. 2004). [5] [6]

Coordination with local stakeholder groups
We believe that an integral part of conserving and recovering sage-grouse will be relying on the guidance from local stakeholder groups. As such, we recommend that the applicant coordinate further efforts more closely with the US Fish and Wildlife Service, local Sage-grouse Working Groups, the Idaho State Sage Grouse Advisory Council, the Idaho Department of Fish and Game, and the Governor's Office of Species Conservation. Conservation groups to consult include the Audubon Society, the Idaho Chapter of the North American Grouse Partnership, the Idaho Falconer's Association, the Nature Conservancy, the Western Watersheds Project as well as the Idaho Conservation League.

Additional Wildlife
In addition to sage-grouse, other wildlife including pygmy rabbits, sage thrasher, sage sparrow, and birds of prey, are of concern. New construction and infrastructure will also change crucial habitat for these species and may inhibit the ability of these species to migrate. The project design should avoid construction in any designated areas or lands for

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[3] West, N.E. Synecology and disturbance regimes of sagebrush steppe ecosystems, p. 15-26. *In* P.G. Entwistle, A.M. DeBolt, J.H. Kaltenecker, and K. Steenhoff, Proceedings: sagebrush steppe ecosystems symposium. USDI Bureau of Land Management Publication BLM/ID/PT-001001+1150, Boise, ID.
[4] Idaho Sage-Grouse Advisory Committee. 2006. *Conservation Plan for the Greater Sage-grouse in Idaho*.
[5] Braun, C.E. 1986. Changes in sage-grouse lek counts with advent of surface coal mining. Proceedings, Issues and technology in the management of impacted western wildlife. *Thorne Ecological Institute* 2: 227-231.
[6] Connelly, J.W., Knick, S.T., Schroeder, M.A., and S.J. Stiver. 2004. Conservation assessment of greater sage-grouse and sagebrush habitats. Western Association of Fish and Wildlife Agencies. Unpublished Report. Cheyenne, Wyoming.

special management of these species. There are also elk, mule deer, and pronghorn antelope in the proposed project area.

The project should avoid and minimize all impact to big game winter habitat. The project site contains good to excellent antelope and sage-grouse habitat. We are concerned how the proposed project will impact this important habitat and the species that depend on it. We are also greatly concerned the project will impact nesting habitat for migratory birds.

Invasive Weeds
The most cost-effective way to deal with noxious weeds is to protect strongholds of native vegetation from activities that either spread noxious weeds directly or create suitable habitat by removing native vegetation and disturbing the soil. Project activities should limit road construction in areas that contain mineral soils where weeds may become established. Roads serve as a primary route for noxious weed species expansion. Special care should be taken to safeguard ecologically intact areas that are not currently infested. The EIS needs to analyze the effects of noxious weeds and describe management of weeds in the project area. For example, management strategies may include ensuring the tires and undercarriage of access vehicles are hosed down prior to site access to dislodge noxious weeds. Further documentation should analyze the effects of regular weed control activities in previously undisturbed areas. For example, weed treatments may affect non-target species and vehicle access may increase fire hazard and soil disturbance.

<u>Public Comment Opportunities</u>
Due to the nature and size of the proposed facility, we suggest the project proponent hold additional public hearings throughout the EIS process in Boise, Idaho.